The following sample questions for aircraft dispatcher tests are suitable study questions for the Aircraft Dispatcher Airman Knowledge Test (ADX). The full ADX test is 80 questions. Please note that the Airline Transport Pilot (ATP) and ADX tests share many questions. Students for the ADX or ATP would do well to study both sets of questions.

The FAA computer-assisted testing system is supported by a series of supplement publications. These publications, available through several aviation publishers, include the graphics, legends, and maps that are needed to successfully respond to certain test items. Use the following URL to download a complete list of associated supplement books: http://www.faa.gov/training_testing/testing/airmen/test_questions/

The Learning Statement Reference Guide for Airman Knowledge Testing contains listings of learning statements with their associated codes. It can be located at: http://www.faa.gov/training_testing/testing/airmen/media/LearningStatementReferenceGuide.pdf

SAMPLE ADX EXAM:

PLT032

- 1. Within what Mach range does transonic flight regimes usually occur?
- A. 1.20 to 2.50 Mach.
- B. .50 to .75 Mach.
- C. .75 to 1.20 Mach.

PLT245

- 2. How can turbulent air cause an increase in stalling speed of an airfoil?
- A. A decrease in angle of attack.
- B. An abrupt change in relative wind.
- C. Sudden decrease in load factor.

PLT303

- 3. What is the effect on total drag of an aircraft if the airspeed decreases in level flight below that speed for maximum L/D?
- A. Drag increases because of increased parasite drag.
- B. Drag decreases because of lower induced drag.
- C. Drag increases because of increased induced drag.

PLT214

- 4. What is the condition that may occur when gusts cause a swept wing type airplane to roll in one direction while yawing in the other?
- A. Wingover.
- B. Mach buffet.
- C. Dutch roll.

PI T004

- 5. By changing the angle of attack of a wing, the pilot can control the airplane's
- A. lift, gross weight, and drag.
- B. lift and airspeed, but not drag.
- C. lift, airspeed, and drag.

- 6. NOTAM (L)'s are used to disseminate what type of information?
- A. Time critical information of a permanent nature that is not yet available in normally published charts.

- B. Taxi closures, personnel and equipment near or crossing runways, airport lighting aids that do not affect instrument approach criteria, and airport rotating beacon outages.
- C. Conditions of facilities en route that may cause delays.

- 7. (Refer to appendix 2, figures 15, 16, and 17.) What is the two-engine rate of climb after takeoff in climb configuration for Operating Conditions BE-21?
- A. 2,450 ft/min.
- B. 1,350 ft/min.
- C. 2,300 ft/min.

PLT004

- 8. (Refer to appendix 2, figures 56, 57, and 58.) What is the ground distance covered during en route climb for Operating Conditions V-5?
- A. 70 NM.
- B. 61 NM.
- C. 52 NM.

PLT007

- 9. (Refer to appendix 2, figures 59 and 60.) What is the max climb EPR for Operating Conditions T-1?
- A. 2.04.
- B. 1.82.
- C. 1.96.

PLT011

- 10. (Refer to appendix 2, figures 56, 57, and 58.) What is the aircraft weight at the top of climb for Operating Conditions V-3?
- A. 82,500 pounds.
- B. 82,200 pounds.
- C. 82,100 pounds.

PLT012

- 11. (Refer to appendix 2, figures 56, 57, and 58.) How much fuel is burned during en route climb for Operating Conditions V-2?
- A. 2.600 pounds.
- B. 2,250 pounds.
- C. 2,400 pounds.

PLT002

12. (Refer to appendix 2, figure 42.) Given the following, what is the airspeed limit (VNE)?

Gross weight 16,500 lb Pressure altitude 5,000 ft Temperature (OAT) -15 °C

- A. 133 KIAS.
- B. 128 KIAS.
- C. 126 KIAS.

PLT012

- 13. (Refer to appendix 2, figures 21, 22, 23, 24, and 25.) What is the en route time of the cruise leg for Operating Conditions BE-35?
- A. 1 hour 8 minutes.
- B. 1 hour 6 minutes.
- C. 1 hour 10 minutes.

- 14. (Refer to appendix 2, figures 19 and 20.) Which statement is true regarding performance with one engine inoperative for Operating Conditions BE-27?
- A. Service ceiling is below the MEA.
- B. Bleed air OFF improves service ceiling by 3,000 feet.
- C. Climb rate at the MEA is more than 50 ft/min.

- 15. (Refer to appendix 2, figure 26.) What are the time and distance to descend from 18,000 feet to 2,500 feet?
- A. 10.0 minutes, 36 NM.
- B. 9.8 minutes, 33 NM.
- C. 10.3 minutes, 39 NM.

PLT004

- 16. (Refer to appendix 2, figures 71 and 72.) What is the approximate level-off pressure altitude after drift-down under Operating Conditions D-3?
- A. 19,800 feet.
- B. 22,200 feet.
- C. 21,600 feet.

PLT007

- 17. (Refer to appendix 2, figures 68 and 69.) What are the recommended IAS and EPR settings for holding under Operating Conditions O-1?
- A. 218 knots and 1.87 EPR.
- B. 221 knots and 1.83 EPR.
- C. 223 knots and 2.01 EPR.

PLT012

- 18. (Refer to appendix 2, figures 84 and 85.) What is the approximate fuel consumed when holding under Operating Conditions H-1?
- A. 2,630 pounds.
- B. 3,500 pounds.
- C. 4,680 pounds.

PLT007

- 19. (Refer to appendix 2, figures 73 and 75.) What is the go-around EPR for Operating Conditions L-5?
- A. 2.00 EPR.
- B. 2.05 EPR.
- C. 2.04 EPR.

PLT008

- 20. (Refer to appendix 2, figure 90.) Which configuration will result in a landing distance of 5,900 feet over a 50 foot obstacle to an icy runway?
- A. Use of brakes and spoilers at 125,000 pounds gross weight.
- B. Use of three reversers at 131,000 pounds gross weight.
- C. Use of three reversers at 133,000 pounds gross weight.

PLT008

- 21. (Refer to appendix 2, figures 27 and 28.) What is the landing distance over a 50-foot obstacle for Operating Conditions B-36?
- A. 1,625 feet.
- B. 1,900 feet.
- C. 950 feet.

- 22. (Refer to appendix 2, figures 51 and 52.) What is the approximate landing weight for Operating Conditions L-1?
- A. 81,600 pounds.
- B. 80,300 pounds.
- C. 78,850 pounds.

- 23. (Refer to appendix 2, figures 73, 74, and 75.) What is VREF for Operating Conditions L-1?
- A. 143 knots.
- B. 145 knots.
- C. 144 knots.

PLT010

- 24. (Refer to appendix 2, figures 53 and 55.) What is the STAB TRIM setting for Operating Conditions R-5?
- A. 7-1/2 ANU.
- B. 6-3/4 ANU.
- C. 8 ANU.

PLT011

25. (Refer to appendix 2, figure 14.) Given the following conditions, what is the accelerate-stop field length?

Pressure altitude 6,000 ft
Temperature (OAT) +10 °C
Weight 16,600 lb
Wind component 15 kts HW
Ice vanes Retracted

- A. 4,950 feet.
- B. 5,300 feet.
- C. 4,800 feet.

PLT011

26. (Refer to appendix 2, figure 14.) Given the following conditions, what is the accelerate-stop field length?

Pressure altitude 8,000 ft
Temperature (OAT) -5 °C
Weight 14,000 lb
Wind component 4 kts TW
Ice vanes Extended

- A. 4,500 feet.
- B. 5,300 feet.
- C. 4,800 feet.

PLT011

- 27. (Refer to appendix 2, figures 45, 46, and 47.) What are V1 and VR speeds for Operating Conditions A-1?
- A. V1 120.5 knots; VR 123.5 knots.
- B. V1 123.1 knots; VR 125.2 knots.
- C. V1 122.3 knots; VR 124.1 knots.

DI TO11

- 28. (Refer to appendix 2, figures 53, 54, and 55.) What is the takeoff EPR for Operating Conditions R-5?
- A. 1.96.
- B. 1.98.
- C. 1.95.

29. (Refer to appendix 2, figures 235 and 236.) Given the following conditions, what is the maximum Slush/Standing Water takeoff weight?

Dry field/obstacle limit weight: 180,000 lb.
Slush/standing water depth: .25 inches
Temperature (OAT): 30° C
Field pressure altitude: 5431 ft.
Field length available: 9000 ft.

No Reverse thrust

A. 130,850 lb.B. 147,550 lb.C. 139,850 lb.

PLT085

30. (Refer to appendix 2, figure 231.) Given the following conditions, what is the takeoff climb limit?

Airport OAT: 38° C
Airport Pressure Altitude: 14 ft.
Flaps: 15°
Engine Bleed for packs: On
Anti-ice: Off

A. 136,000 lb.B. 137,500 lb.C. 139,000 lb.

PLT169

31. (Refer to appendix 2, figure 12.) Given the following conditions, what is the minimum torque for takeoff?

Pressure altitude 3,500 ft
Temperature (OAT) +43 °C
Ice vanes Retracted

A. 3,000 foot-pound.B. 3,110 foot-pound.C. 3,050 foot-pound.

PLT020

32. (Refer to appendix 2, figures 63 and 64.) What is the turbulent air penetration N1 power setting for Operating Conditions Q-1?

A. 84.0 percent.B. 82.4 percent.

C. 84.8 percent.

PLT012

33. (Refer to appendix 2, figures 66 and 67.) What is the trip time corrected for wind under Operating Conditions Z-5?

A. 1 hour 11 minutes.

B. 62 minutes.

C. 56 minutes.

PLT012

34. (Refer to appendix 2, figures 103, 104, 105, and 106.) Estimate the total fuel required to be on the aircraft, prior to taxi at Tucson Intl. (Use 13°E for problem magnetic variation.)

A. 2,223 pounds.

B. 2,447 pounds.

C. 2,327 pounds.

35. (Refer to appendix 2, figures 66 and 67.) What is the estimated fuel consumption for Operating Conditions Z-1?

A. 5,970 pounds.

B. 5,230 pounds.

C. 5,550 pounds.

PLT016

36. (Refer to appendix 2, figure 70.) How many minutes of dump time is required to reduce fuel load to 16,000 pounds (@ 2,350 lbs/min)?

Initial weight 175,500 lb Zero fuel weight 138,000 lb

A. 9 minutes.

B. 8 minutes.

C. 10 minutes.

PLT015

- 37. Maximum range performance of a turbojet aircraft is obtained by which procedure as aircraft weight reduces?
- A. Increasing speed or decreasing altitude.
- B. Increasing altitude or decreasing speed.
- C. Increasing speed or altitude.

PLT473

- 38. What is the purpose of an anti-servo tab?
- A. Prevent a control surface from moving to a full-deflection position due to aerodynamic forces.
- B. Reduce control forces by deflecting in the proper direction to move a primary flight control.
- C. Move the flight controls in the event of manual reversion.

PLT473

- 39. Which is a purpose of ground spoilers?
- A. Aid in rolling an airplane into a turn.
- B. Increase the rate of descent without gaining airspeed.
- C. Reduce the wings' lift upon landing.

PLT128

- 40. During an en route descent in a fixed-thrust and fixed-pitch attitude configuration, both the ram air input and drain hole of the pitot system become completely blocked by ice. What airspeed indication can be expected?
- A. Increase in indicated airspeed.
- B. Indicated airspeed remains at the value prior to icing.
- C. Decrease in indicated airspeed.

PLT108

- 41. What is the minimum glycol content of Type 1 deicing/anti-icing fluid?
- A. 50 percent.
- B. 30 percent.
- C. 80 percent.

- 42. Which of the following will decrease the holding time during anti-icing using a two-step process?
- A. Apply heated Type 2 fluid.
- B. Increase the viscosity of Type 1 fluid.
- C. Decrease the water content.

- 43. What is a symptom of carbon monoxide poisoning?
- A. Rapid, shallow breathing.
- B. Dizziness.
- C. Pain and cramping of the hands and feet.

PLT379

- 44. An airport may not be qualified for alternate use if
- A. the airport has AWOS-3 weather reporting.
- B. the airport is located next to a restricted or prohibited area.
- C. the NAVAIDS used for the final approach are unmonitored.

PLT361

- 45. How does the SDF differ from an ILS LOC?
- A. SDF 15° usable off course indications, ILS 35°.
- B. SDF 6° or 12° wide, ILS 3° to 6°.
- C. SDF offset from runway plus 4° minimum, ILS aligned with runway.

PLT128

- 46. Test data indicate that ice, snow, or frost having a thickness and roughness similar to medium or coarse sandpaper on the leading edge and upper surface of a wing can
- A. reduce lift by as much as 30 percent and increase drag by 40 percent.
- B. increase drag and reduce lift by as much as 40 percent.
- C. reduce lift by as much as 40 percent and increase drag by 30 percent.

PLT055

- 47. (Refer to appendix 2, figure 121, upper panel.) On the airway J220 (BUF R-158) SE of Buffalo, the MAA is 39,000 feet. What is the MAA on J547 between BUF and PMM (lower panel)?
- A. 60,000 feet.
- B. 45,000 feet.
- C. 43,000 feet.

PLT395

- 48. What is the name of an area beyond the end of a runway which does not contain obstructions and can be considered when calculating takeoff performance of turbine-powered aircraft?
- A. Stopway.
- B. Obstruction clearance plane.
- C. Clearway.

PLT432

- 49. Operational control of a flight refers to
- A. exercising the privileges of pilot in command of an aircraft.
- B. the specific duties of any required crewmember.
- C. exercising authority over initiating, conducting, or terminating a flight.

- 50. The reserve fuel supply for a domestic air carrier flight is
- A. 30 minutes plus 15 percent at normal fuel consumption in addition to the fuel required to the alternate airport.
- B. 45 minutes at normal fuel consumption in addition to the fuel required to the alternate airport.
- C. 45 minutes at normal fuel consumption in addition to the fuel required to fly to and land at the most distant alternate airport.

- 51. What restrictions must be observed regarding the carrying of cargo in the passenger compartment of an airplane operated under FAR Part 121?
- A. All cargo must be separated from the passengers by a partition capable of withstanding certain load stresses.
- B. Cargo may be carried aft of a divider if properly secured by a safety belt or other tiedown having enough strength to eliminate the possibility of shifting.
- C. All cargo must be carried in a suitable flame resistant bin and the bin must be secured to the floor structure of the airplane.

PLT390

- 52. Who must the crew of a domestic or flag air carrier airplane be able to communicate with, under normal conditions, along the entire route (in either direction) of flight?
- A. Appropriate dispatch office.
- B. Any FSS.
- C. ARINC.

PLT441

- 53. By regulation, who shall provide the pilot in command of a domestic or flag air carrier airplane information concerning weather, and irregularities of facilities and services?
- A. Air route traffic control center.
- B. The aircraft dispatcher.
- C. Director of operations.

PLT452

- 54. A domestic air carrier flight has a delay while on the ground, at an intermediate airport. How long before a redispatch release is required?
- A. Not more than 2 hours.
- B. More than 6 hours.
- C. Not more than 1 hour.

PLT394

- 55. An aircraft dispatcher declares an emergency for a flight and a deviation results. A written report shall be sent through the air carriers operations manager by the
- A. dispatcher to the FAA Administrator within 10 days of the event.
- B. pilot in command to the FAA Administrator within 10 days of the event.
- C. certificate holder to the FAA Administrator within 10 days of the event.

PLT403

- 56. When the pilot in command is responsible for a deviation during an emergency, the pilot should submit a written report within
- A. 10 days after returning home.
- B. 10 days after the deviation.
- C. 10 days after returning to home base.

PLT409

- 57. Under which condition is a flight engineer required as a flight crewmember in FAR Part 121 operations?
- A. If the airplane is being flown on proving flights, with revenue cargo aboard.
- B. If required by the airplane's type certificate.
- C. If the airplane is powered by more than two turbine engines.

- 58. A flag air carrier may schedule a pilot to fly in an airplane, having two pilots and one additional flight crewmember, for no more than
- A. 8 hours during any 12 consecutive hours.

- B. 12 hours during any 24 consecutive hours.
- C. 10 hours during any 12 consecutive hours.

- 59. For flights above which cabin altitude must oxygen be provided for all passengers during the entire flight at those altitudes?
- A. 14,000 feet.
- B. 16,000 feet.
- C. 15,000 feet.

PLT396

- 60. If a four-engine air carrier airplane is dispatched from an airport that is below landing minimums, what is the maximum distance that a departure alternate airport may be located from the departure airport?
- A. Not more than 2 hours at normal cruise speed in still air with one engine inoperative.
- B. Not more than 2 hours at cruise speed with one engine inoperative.
- C. Not more than 1 hour at normal cruise speed in still air with one engine inoperative.

PLT449

- 61. If a flight crewmember completes a required annual flight check in December 1987 and the required annual recurrent flight check in January 1989, the latter check is considered to have been taken in
- A. January 1989.
- B. November 1988.
- C. December 1988.

PLT398

- 62. For flight planning, a Designated ETOPS Alternate Airport
- A. for ETOPS up to 180 minutes, must have RFFS equivalent to that specified by ICAO Category
- 3, unless the airport's RFFS can be augmented by local fire fighting assets within 45 minutes.
- B. for ETOPS up to 180 minutes, must have RFFS equivalent to that specified by ICAO Category
- 4, unless the airport's RFFS can be augmented by local fire fighting assets within 45 minutes.
- C. for ETOPS up to 180 minutes, must have RFFS equivalent to that specified by ICAO Category
- 4, unless the airport's RFFS can be augmented by local fire fighting assets within 30 minutes.

PLT389

- 63. Where is a list maintained for routes that require special navigation equipment?
- A. International Flight Information Manual.
- B. Air Carrier's Operations Specifications.
- C. Airplane Flight Manual.

PLT462

- 64. A crewmember interphone system is required on which airplane?
- A. A large airplane.
- B. An airplane with more than 19 passenger seats.
- C. A turbojet airplane.

- 65. When a pilot plans a flight using NDB NAVAIDS, which rule applies?
- A. The airplane must have sufficient fuel to proceed, by means of one other independent navigation system, to a suitable airport and complete an instrument approach by use of the remaining airplane radio system.
- B. The pilot must be able to return to the departure airport using other navigation radios anywhere along the route with 150% of the forecast headwinds.
- C. The airplane must have sufficient fuel to proceed, by means of VOR NAVAIDS, to a suitable airport and land anywhere along the route with 150% of the forecast headwinds.

- 66. Normally, a dispatcher for domestic or flag operations should be scheduled for no more than
- A. 10 hours of duty in any 24 consecutive hours.
- B. 8 hours of service in any 24 consecutive hours.
- C. 10 consecutive hours of duty.

PLT011

- 67. When computing the takeoff data for reciprocating powered airplanes, what is the percentage of the reported headwind component that may be applied to the 'still air' data?
- A. Not more than 100 percent.
- B. Not more than 50 percent.
- C. Not more than 150 percent.

PLT447

- 68. When a facsimile replacement is received for an airman's medical certificate, for what maximum time is this document valid?
- A. 30 days.
- B. 90 days.
- C. 60 days.

PLT367

- 69. Which operational requirement must be observed by a commercial operator when ferrying a large, three-engine, turbojet-powered airplane from one facility to another to repair an inoperative engine?
- A. The existing and forecast weather for departure, en route, and approach must be VFR.
- B. No passengers may be carried.
- C. The computed takeoff distance to reach V1 must not exceed 70 percent of the effective runway length.

PLT072

- 70. (Refer to appendix 2, figure 147.) At which time is IFR weather first predicted at Lubbock (KLBB)?
- À. 2100Z.
- B. 0400Z.
- C. 0100Z.

PLT059

- 71. (Refer to appendix 2, figure 145.) What condition is reported at Childress (KCDS)?
- A. Light rain showers.
- B. The ceiling is solid overcast at an estimated 1,800 feet above sea level.
- C. Heavy rain showers began 42 minutes after the hour.

PLT042

- 72. (Refer to appendix 2, figures 153, 154, and 155.) Interpret the path of the jetstream.
- A. Southern California, Nevada, Utah, Nebraska/Kansas, and then southeastward.
- B. The Alaska area, across Canada to Montana, South Dakota, then across the Great Lakes area.
- C. Oregon, Idaho, Wyoming, Nebraska, Iowa, and across the Great Lakes.

- 73. (Refer to appendix 2, figures 153, 154, and 155.) What type weather is inferred by the almost vertical extent of the LOW in Canada?
- A. A slow-moving storm which may cause extensive and persistent cloudiness, precipitation, and generally adverse flying weather.

- B. A rapid-moving system with little chance of developing cloudiness, precipitation, and adverse flying conditions.
- C. A rapid-moving storm, leaning to west with altitude, which encourages line squalls ahead of the system with a potential of severe weather.

74. KFTW UA/OV DFW/TM 1645/FL100/TP PA30/SK SCT031-TOP043/BKN060-TOP085/OVC097-TOPUNKN/WX FV00SM RA/TA 07.

This pilot report to Fort Worth (KFTW) indicates

- A. the aircraft is in light rain.
- B. the ceiling at KDFW is 6,000 feet.
- C. that the top of the ceiling is 4,300 feet.

PLT063

- 75. (Refer to appendix 2, figure 152.) What weather conditions are depicted in the area indicated by arrow B on the Radar Summary Chart?
- A. Weak echoes; heavy rain showers; area movement toward the southeast.
- B. Strong echoes; moderate rain showers; no cell movement.
- C. Weak to moderate echoes; rain showers increasing in intensity.

PLT493

- 76. Which conditions result in the formation of frost?
- A. The temperature of the collecting surface is at or below freezing and small droplets of moisture are falling.
- B. Temperature of the collecting surface is below the dewpoint and the dewpoint is also below freezing.
- C. Dew collects on the surface and then freezes because the surface temperature is lower than the air temperature.

PLT475

- 77. Where do squall lines most often develop?
- A. Ahead of a cold front.
- B. In an occluded front.
- C. Behind a stationary front.

PLT313

78. What is the minimum floor load limit that an aircraft must have to carry the following pallet of cargo?

Pallet dimensions are 78.9 X 98.7 inches

Pallet weight 161 lb
Tiedown devices 54 lb
Cargo weight 9,681.5 lb

- A. 183 lb/sq ft.
- B. 186 lb/sq ft.
- C. 180 lb/sq ft.

PLT121

- 79. (Refer to appendix 2, figures 77, 79, and 80.) What is the gross weight index for Loading Conditions WT-6?
- A. 181,340.5 index.
- B. 165,991.5 index.
- C. 156,545.0 index.

- 80. What are some characteristics of an airplane loaded with the CG at the aft limit?
- A. Lowest stall speed, lowest cruise speed, and highest stability.

- B. Highest stall speed, highest cruise speed, and least stability.C. Lowest stall speed, highest cruise speed, and least stability.